

## REQUEST FOR ACCESS TO AN ABANDONED APPLICATION UNDER 37 CFR 1.14

Bring completed form to:  
 File Information Unit  
 Crystal Plaza Three, Room 1D01  
 2021 South Clark Place  
 Arlington, VA  
 Telephone: (703) 308-2733

In re Application of

Thomson

Application Number

08/376,327

Filed

1/20/95

Paper No. 33

I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment):

United States Patent Application Publication No. \_\_\_\_\_, page, \_\_\_\_\_ line \_\_\_\_\_.

United States Patent Number 5,843,780, column 1, line, \_\_\_\_\_ or

WIPO Pub. No. \_\_\_\_\_, page \_\_\_\_\_, line \_\_\_\_\_.

**Related Information about Access to Pending Applications (37 CFR 1.14):**

Direct access to pending applications is not available to the public but copies may be available and may be purchased from the Office of Public Records upon payment of the appropriate fee (37 CFR 1.19(b)), as follows:

For published applications that are still pending, a member of the public may obtain a copy of:

- the file contents;
- the pending application as originally filed; or
- any document in the file of the pending application.

For unpublished applications that are still pending:

- (1) If the benefit of the pending application is claimed under 35 U.S.C. 119(e), 120, 121, or 365 in another application that has: (a) issued as a U.S. patent, or (b) published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of:
  - the file contents;
  - the pending application as originally filed; or
  - any document in the file of the pending application.
- (2) If the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of:
  - the pending application as originally filed.

Rayline K. Petitt

Signature

Rayline K. Petitt

Typed or printed name

n/a

Registration Number, if applicable

703-415-3060

Telephone Number

June 6, 2006

Date

	RECEIVED
Approved	JUN 06 2006
	(initials)
File Information Unit	

This collection of information is required by 37 CFR 1.14. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. BRING TO: File Information Unit, Crystal Plaza Three, Room 1D01, 2021 South Clark Place, Arlington, VA.



US005843780A

**United States Patent** [19]  
**Thomson**

[11] **Patent Number:** **5,843,780**  
[45] **Date of Patent:** **Dec. 1, 1998**

[54] **PRIMATE EMBRYONIC STEM CELLS**

[75] Inventor: James A. Thomson, Madison, Wis.

[73] Assignee: Wisconsin Alumni Research Foundation, Madison, Wis.

[21] Appl. No.: 591,246

[22] Filed: Jan. 18, 1996

**Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 376,327, Jan. 20, 1995.

[51] Int. Cl.<sup>6</sup> ..... C12N 5/06

[52] U.S. Cl. ..... 435/363; 435/366; 435/373

[58] Field of Search ..... 435/363, 366,  
435/373

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

5,449,620	9/1995	Khillan .	
5,453,357	9/1995	Hogan .....	435/7.21
5,591,625	1/1997	Gerson et al. .	

**FOREIGN PATENT DOCUMENTS**

WO 94/03585 2/1994 WIPO .

**OTHER PUBLICATIONS**

Bongso, et al., "Isolation and culture of inner cell mass cells from human blastocysts", Human Reproduction, 9:2110-2117, 1994.

Brown, et al., "Criteria that optimize the potential of murine embryonic stem cells for *in vitro* and *in vivo* developmental studies", In Vitro Cell. Dev. Biol. 284:773-778, Dec. 1992.

Damjanov, et al., "Retinoic acid-induced differentiation of the developmentally pluripotent human germ cell tumor-derived cell line, NCCIT", Laboratory Investigation, 68:220-232, 1993.

Nation/World, "Embryonic monkey cells isolated". -Nov. 4, 1994.

Bongso, A., et al., "The Growth of Inner Cell Mass Cells from Human Blastocysts," *Theriogenology*, 41:167 (1994).

Thomson, James A., et al., "Pluripotent Cell Lines Derived from Common Marmoset (*Callithrix jacchus*) Blastocysts," *Biology of Reproduction*, 55:254-259 (1996).

*Primary Examiner*—Michael P. Woodward

*Assistant Examiner*—Brenda G. Brumback

*Attorney, Agent, or Firm*—Quarles & Brady

[57] **ABSTRACT**

A purified preparation of primate embryonic stem cells is disclosed. This preparation is characterized by the following cell surface markers: SSEA-1 (-); SSEA-3 (+); SSEA-4 (+); TRA-1-60 (+); TRA-1-81 (+); and alkaline phosphatase (+). In a particularly advantageous embodiment, the cells of the preparation have normal karyotypes and continue to proliferate in an undifferentiated state after continuous culture for eleven months. The embryonic stem cell lines also retain the ability, throughout the culture, to form trophoblast and to differentiate into all tissues derived from all three embryonic germ layers (endoderm, mesoderm and ectoderm). A method for isolating a primate embryonic stem cell line is also disclosed.

**11 Claims, 8 Drawing Sheets**